range from 10 to 100 µm, preferably 25 to 40 µm, or which essentially have the form of chips or needles and a longitudinal extension in the range from 10 to 110 µm, preferably 40 to 80 µm, or a mixture thereof.

9. Process according to any one of claims 1 or 5, characterized in that the transfer layers are printed onto the base medium in such a way that the motif represented is of the correct side in the plan view.

REMARKS

Allowable Subject Matter

The applicant acknowledges the Examiner's position that **claims 2 and 4** are deemed allowable if rewritten in independent form incorporating the limitation of the preceding claims.

Claim Objections

Claims 6-9 were objected to as having improper multiple dependent form. Corrections were made accordingly.

35 USC § 112

Claim 3 was rejected under 35 USC § 112 as being indefinite for lack of antecedent basis for the term "intermediate ink layer". The applicant agrees and amended claim 3 accordingly.

35 USC § 102

Claims 1 and 5 were rejected under 35 USC § 102(b) as being anticipated by Olsen (U.S. Pat. No. 5,503,906). The applicant disagrees, especially in view of the following:

Claims 1 and 5 expressly require that the base medium is an adhesive-repellant medium, which is not taught by Olsen. In fact, **the base sheet 16 in the process according to U.S. Pat. No. 5,503,906 can not be an adhesive-repellant for various reasons.** Among other things, it is especially important for the functionality of Olsen's transfer sheet that the transfer sheet is not adhesive repellant, since during the peeling-back of the carrier 14 (comprising the base sheet 16 and the wax sheet 18) as illustrated in Fig. 2 in the '906 reference, the wax sheet 18 has to stick

on the base sheet 16 and not to the microspheres 12. In contrast to this, the adhesive-repellant base medium 1 according to the present invention (which may *e.g.* be silicon-treated) is substantially completely removed, since it is this layer which is neighbored to the transfer adhesive to be placed on the substrate (see fig. 1-3 of the present invention). Therefore, Olsen also fails to suggest or to provide a motivation to modify his teachings such as to arrive at the subject matter as presently claimed. Therefore, claims 1 and 5 are neither anticipated, nor obvious over Olsen.

With respect to obviousness, the applicant still further points out that Olsen's process starts with disposing microspheres 12 on a heat-softenable layer 18 (made *e.g.* of wax or silicone, see column 4, lines 12 to 14 of U.S. Pat. No. 5,503,906) being deposited on a base sheet 16 (made *e.g.* of a Kraft paper or a heat resistant polyester foil, see column 4, lines 11 to 12). Said microspheres 12 are then covered by graphic segments comprising a color layer 22 and/or a reflective layer 26, on which a bonding layer 28 is deposited at the top. Accordingly, the **print has to be applied in a mirror-reversed fashion** (see column 4, lines 56 to 58), since the transfer sheet is used by laying it on the substrate with the bonding layer 28 facing the substrate (see also Fig. 2 and column 9, lines 3 to 5).

In contrast, the process for the manufacture of a screen print reflection transfer according to the presently claimed subject matter starts with providing an adhesive-repellent base medium, followed by a transfer adhesive as well as a reflection ink containing a plurality of reflection particles, which are then dried to be raised above the surface of the hardened reflection ink. It is important to note that the **imprinting is carried out with the correct side to accord with the motif desired**, *i.e.*, not in a mirror-reversed fashion. As shown in figures 1 to 3 of the present application, the consequence is that the reflection particles 4 are no longer pressed into *e.g.*, the ink layer, but light rays 7 are effectively reflected by the reflection particles 4 as illustrated in figure 3 of the present application. Accordingly, the present invention provides a simple and very effective method for the manufacture of a screen print reflection transfer which exhibits very good reflection properties after transferring onto a substrate.

As a still further consequence (as can be seen from figure 2 of U.S. Pat. No. 5,503,906), the side of the color layer which is later forming the surface turned towards the light is turned

towards the transfer carrier. Since this feature may cause that the reflection particles cannot protrude sufficiently from the later external surface (an effect which is also schematically illustrated in figure 4 to 6 directed to the prior art of the present application), it is generally necessary to take further steps to provide for sufficient reflection properties (microspheres 12, wax layer 18, etc.), thereby rendering the '906 process significantly more complicated.

Additionally, the deposition of the microspheres 12 as well as the color layer 22 according to the '906 reference does not only provide for additional steps enhancing the complexity of the process, but is also difficult in practice, in particular if very fine structures have to be reproduced. Moreover, a further drawback of the Olsen process/transfer sheet is that the removal of the carrier layer 14 as illustrated in figure 2 is generally not possible without generating a large amount of residues, resulting in a significant deterioration of the reflection properties.

35 USC § 103

Claim 3 was rejected under 35 USC § 103 as being obvious over Olsen. Among other things, dependent claim 3 is dependent on allowable claim 1 and should therefore not be held obvious for the reasons provided above.

Finally, the applicant points out that U.S. Pat. No. 5,503,906 has been acknowledged by the European Patent Office, however, was not considered a reference that would teach or suggest the subject matter as presently claimed.

ATTACHED MARKED-UP VERSION OF CHANGES

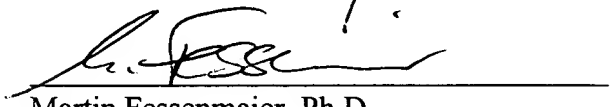
Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE".

REQUEST FOR ALLOWANCE

Claims 1-9 are pending in this application. The applicant requests allowance of all pending claims.

Respectfully submitted,

Rutan & Tucker, LLP

Dated: February 24, 2003 By: 

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VERSIONS WITH MARKING TO SHOW CHANGES MADE

In the Claims

3. (Twice amended) Process according to claim 1, characterized in that the transfer adhesive (2) is dried after imprinting the base medium (1) and before printing of at least one of the reflection ink (3) [and/or] and an [the] intermediate ink layer (8).

6. (Twice amended) Process according to any one of claims 1 [and] or 5, characterized in that a transfer medium (5) is additionally applied to the dried and hardened transfer.

7. (Twice amended) Process according to any one of claims 1 [and] or 5, characterized in that the transfer adhesive is transparent, colored translucent, or full-colored, and in particular that it is full-color white.

8. (Twice amended) Process according to any one of claims 1 [and] or 5, characterized in that reflection particles (4) are used which are essentially spherical in shape and which have a grain diameter in the range from 10 to 100 μm, preferably 25 to 40 μm, or which essentially have the form of chips or needles and a longitudinal extension in the range from 10 to 110 μm, preferably 40 to 80 μm, or a mixture thereof.

9. (Twice amended) Process according to any one of claims 1 [and] or 5, characterized in that the transfer layers are printed onto the base medium in such a way that the motif represented is of the correct side in the plan view.

CLEAN VERSION OF PRESENTLY PENDING CLAIMS

1. Process for the manufacture of a screen print reflection transfer, comprising the steps:
providing an adhesive-repellant base medium (1);
imprinting the base medium (1) with a transfer adhesive (2);
printing a reflection ink (3), whereby the reflection ink being used is containing a plurality of reflection particles; and
drying the transfer.

2. Process according to claim 1, characterized in that, before printing the reflection ink (3), an intermediate ink layer (8) is imprinted in an additional step onto the imprinted transfer adhesive agent (2).

3. Process according to claim 1, characterized in that the transfer adhesive (2) is dried after imprinting the base medium (1) and before printing of at least one of the reflection ink (3) and an intermediate ink layer (8).

4. Process according to claim 2, characterized in that the intermediate ink layer (8) is dried before printing the reflection ink (3).

5. Process for the manufacture of a screen print reflection transfer, comprising the steps:
providing an adhesive-repellant base medium (1);
imprinting the base medium (1) with a transfer adhesive/reflection ink mixture, whereby the mixture contains a plurality of reflection particles, or with a transfer adhesive which contains a plurality of reflection particles; and
drying the transfer.

6. Process according to any one of claims 1 or 5, characterized in that a transfer medium (5) is additionally applied to the dried and hardened transfer.

7. Process according to any one of claims 1 or 5, characterized in that the transfer adhesive is transparent, colored translucent, or full-colored, and in particular that it is full-color white.

8. Process according to any one of claims 1 or 5, characterized in that reflection particles (4) are used which are essentially spherical in shape and which have a grain diameter in the range from 10 to 100 µm, preferably 25 to 40 µm, or which essentially have the form of chips or needles and a longitudinal extension in the range from 10 to 110 µm, preferably 40 to 80 µm, or a mixture thereof.

9. Process according to any one of claims 1 or 5, characterized in that the transfer layers are printed onto the base medium in such a way that the motif represented is of the correct side in the plan view.